

## FY 2002–2004 PERFORMANCE BASED INCENTIVE

### SECTION 1 GENERAL INFORMATION

Performance Incentive Number: PBI-13 (Office of Nuclear Energy/Office of Science)  
Program Based Summary Number: N/A  
Performance Incentive Short Title: Nuclear Energy Research & Development  
Revision Number & Date: May 23, 2002  
Maximum Available Incentive Fee: \$4800K (\$1600K annual)  
Performance Incentive Type: ☒ Base ☐ Stretch ☐ Superstretch  
Duration: ☒ Annual ☒ Multi-year  
Fee Payment Type: ☒ Completion ☐ Progress ☐ Provisional  
DOE Technical Monitor: James Werner  
BBWI Technical Monitor: James Lake  
(check appropriate box)

### SECTION 2 PERFORMANCE OUTCOMES

Check Appropriate Box:

- ☐ Outcome #1 Deliver science-based, engineered solutions.  
☐ Outcome #2 Complete environmental cleanup responsibly.  
☐ Outcome #3 Provide leadership and support to optimize investments.  
☒ Outcome #4 Enhance scientific and technical talent, facilities, and equipment.

### SECTION 3 PERFORMANCE MEASURES AND EXPECTATION (S)

List associated performance measures and performance expectations for FY02 through FY04. Identify associated PBS # for each performance measures as appropriate.

**Measure 1:** Lead DOE efforts to revitalize Nuclear Energy and strengthen US leadership in nuclear technology, maintain and apply INEEL key capabilities and infrastructure to support DOE's Nuclear Energy Mission, and establish National User Facilities at INEEL (e.g. STAR, and facilities based on the ATR).

**Expectation 1.1:** Lead the effort to develop a Generation IV Technology Roadmap. Complete the following second-year Generation IV roadmap milestones.

- Deliver the Interim Roadmap Report to DOE HQ by July 31, 2002. INEEL will document the down-select contained in the report to the DOE ID office. The down-select intends to identify 4-8 concepts to be included in the Final Roadmap report.
- Deliver the Final Roadmap Report to DOE HQ by September 30, 2002. Document the transmittal to the DOE ID office.

**Expectation 1.2:** As a Nuclear Reactor Technology Lead Laboratory, provide effective leadership and coordination to DOE NE in areas that directly address the National Energy Policy by advancing the Generation IV R&D strategies and actions for a return to the utilization of nuclear power as a major, emission-free energy resource and assist in their development of initiatives on (1) regulatory and policy reform, (2) optimization of current fleet, (3) construction of new nuclear plants, and (4) optimization of the nuclear fuel cycle. Support industry and the NRC on plans for a PBMR technology demonstration facility decision selected by FY 2004.

- For a major Generation IV R&D program, deliver a program infrastructure and staffing assessment, including an international perspective on collaborations, to DOE ID by May 31, 2002.
- Conduct a briefing and open forum on Generation IV for nuclear development stakeholders (the R&D

## FY 2002–2004 PERFORMANCE BASED INCENTIVE

community, industry and government, and international organizations and governments) by September 30, 2002..

- Provide effective leadership and coordination to DOE NE with special emphasis in the areas of Generation IV R&D program development, international collaborations, academic networking and laboratory teaming. Document activities monthly to DOE ID and accumulate the value of this subjective measure quarterly through September 30, 2002.
- Support ANL in the development and execution of funded fuel cycle R&D programs. Document the INEEL support (i.e., scope of funded R&D projects) to DOE ID by September 30, 2002.
- Support Exelon's evaluation of a candidate site for a PBMR, and support the development of an integrated government (NRC/DOE) fuel-testing program for PBMR fuel. Specifically, support Exelon and NRC/DOE milestones planned for Fall/Winter 2001 and document to DOE-ID by March 30, 2002.

**Expectation 1.3:** Develop INEEL user facilities by seeking necessary base funding toward the objective of having multiple facilities operational by September 30, 2004.

Complete the following milestones:

- Document to DOE-ID that the STAR Facility project turnover (per Form 432.02) has been completed by January 31, 2002.
- Support the development of a new User Facility based on the ATR by briefing DOE HQ stakeholders on resource needs and facility benefits to Generation IV R&D, working toward securing funding for the user facility, and obtaining an expression of support from a sponsor or program by September 30, 2002.

## SECTION 4 FEE SCHEDULE

*Identify fee payment schedule for the PBI and the type of payments to be made (e.g., provisional, progress, final) and the basis of the payment (e.g., per canister completed, per assembly, earned value, etc.)*

The measures, schedule, and payment basis will be rated on objective milestones and deliverables.

Expectation 1.1: The maximum fee available is \$700K. Fee will be reduced by 1% per workday if the established milestone date is missed. A  $\pm 10\%$  quality assessment will be given to each deliverable as a measure of benefit to the government.

Expectation 1.2: The maximum fee available is \$600K. Fee will be reduced by 1% per workday if the established milestone date is missed. A  $\pm 10\%$  quality assessment will be given to each deliverable as a measure of benefit to the government.

Expectation 1.3: The maximum fee available is \$300K. Fee will be reduced by 1% per workday if the established milestone date is missed. A  $\pm 10\%$  quality assessment will be given to each deliverable as a measure of benefit to the government.

## SECTION 5 PERFORMANCE REQUIREMENTS

**PREVIOUS YEAR'S GATEWAY:** *(Describe previous year's gateway (if applicable) that must be completed before fee can be paid under this performance measure. The requirements listed below are the gateway only requirements for this Performance Measure.)*

The Measures in this PBI are related to FY01 measures 2.2.3.1 (Generation IV Roadmap), 2.2.3.2 (STAR), 4.4.1.2 (NE Lead Laboratory), and 4.4.2.1 (Nuclear Energy R&D Strategy). These measures serve to continue the path forward for maintaining our NE lead laboratory role, capabilities, and infrastructure to support the nuclear energy industry.

## FY 2002–2004 PERFORMANCE BASED INCENTIVE

industry.

**GENERAL REQUIREMENTS:** (Describe other performance required beyond those stated in measure or expectation such as cost constraints or requirements contained in the approved project plan.)

FY03 and FY04 specific deliverables will be proposed by October 1, of each fiscal year for inclusion in this PBI.

**DEFINE COMPLETION:** The Measures, schedule, and payment basis will be rated on objective milestones and deliverables.

**COMPLETE DOCUMENTS LIST:** The current list of Measures and documents are defined section 3 above.

**ASSUMPTIONS/TECHNICAL BOUNDARY CONDITIONS AND REMEDY STATED:** (List foreseeable impacts to performance, which are not covered under the Contract. If the assumption or condition proves false the remedy shall be in effect. If remedy is not possible the next step is renegotiation.)

None

### SECTION 6 SIGNATURES



N. S. Burrell

Contracting Officer Representative

Deputy <sup>US</sup> Assistant Manager

Research and Development

5-23-02

Date



H. S. Blackman for P. K. Kearns

Vice President and Deputy Laboratory Director

Research and Development

5-23-02

Date